

Implementing Accessibility for the Web Platform

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The web is for
everyone.

Accessibility is
useful for everyone.



Accessibility is
(increasingly) the
law.

U.S. Supreme Court Rejects Domino's Bid to Avoid Disabilities Suit

By Reuters

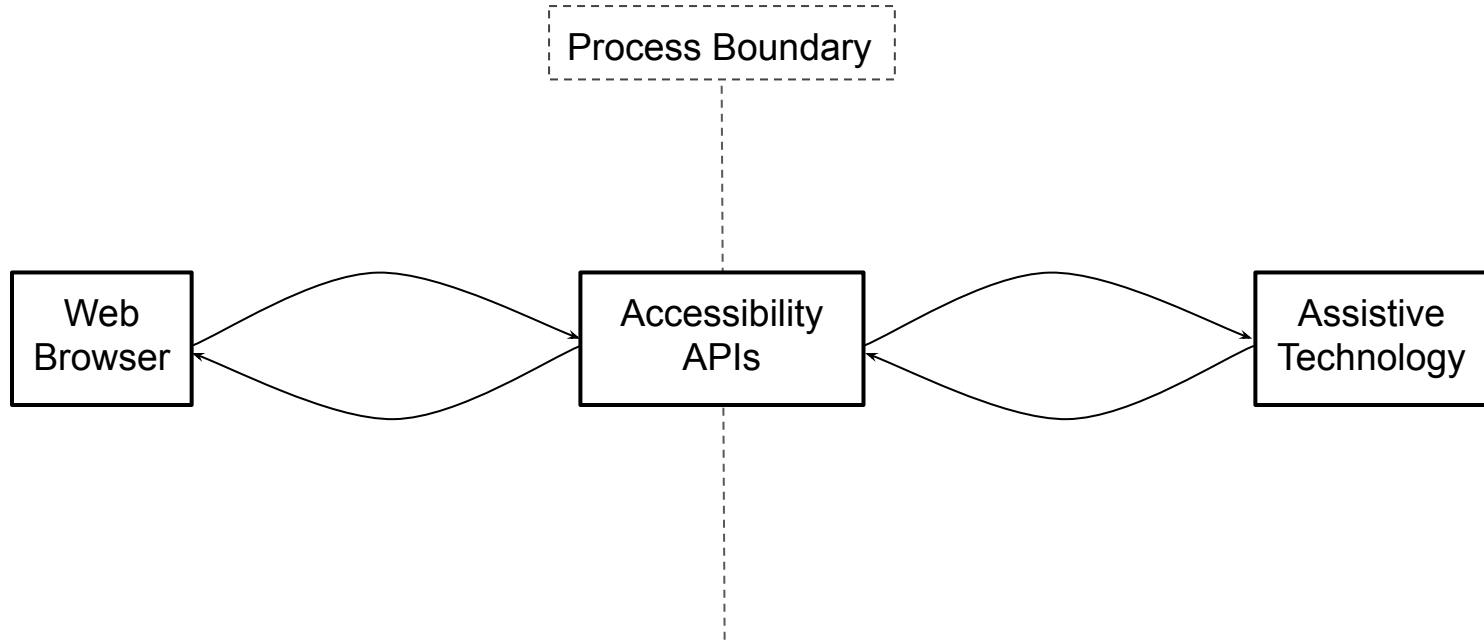
Oct. 7, 2019



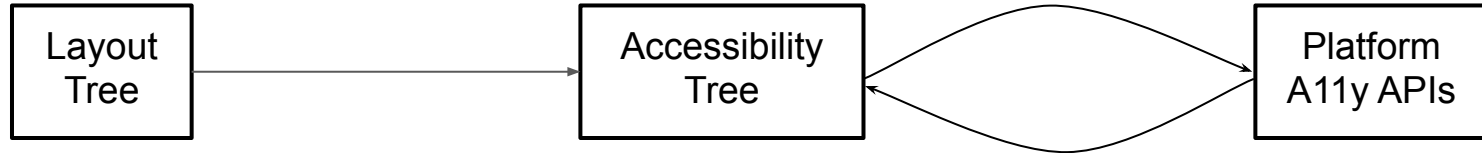
Assistive Technologies

- Screen reader
- Braille displays
- On-screen keyboards
- Magnifiers
- Debug inspectors

Architecture



Web Browser Architecture



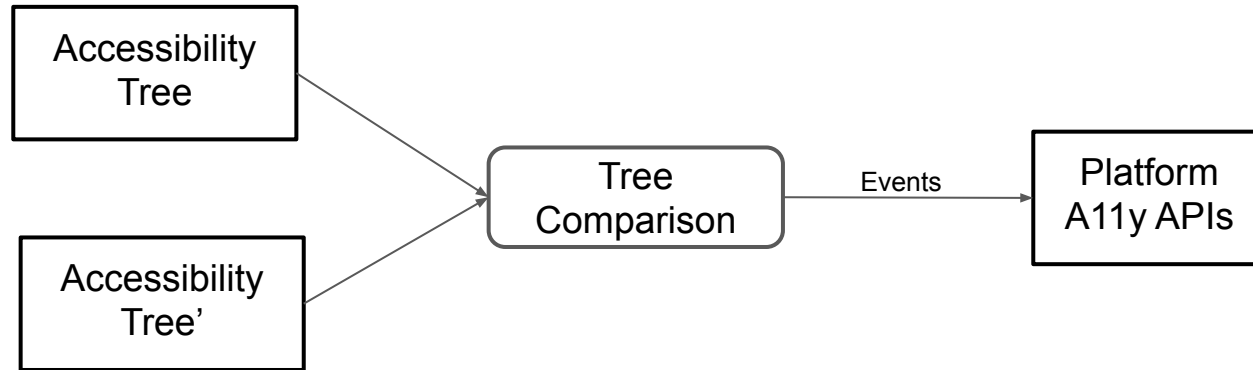
Platform Interface - Queries

- Structure of accessibility tree
- Object dimensions and positions
- Role of accessibility objects
- Properties of nodes
- Text content of node
- Cursor and selection information
- Structure of tables

Platform Interface - Actions

- Activate links and other interface elements
- Open and traverse menus
- Select menu options
- Change cursor position or selection
- Scroll browser window
- Scroll an element into view.

Chromium Specific Details



Platform Interface - Events

- Cursor and selection changes
- Node focus changes
- Window activation changes
- Parent or children of node changes
- Node property and attribute changes

What are we doing?

- Implementing this for Chromium and ATK
- Lots of connecting Chromium interfaces to platform interfaces
- Accessibility on the Linux desktop is divided into two pieces
 - ATK: Server-side
 - AT-SPI2: Client-side
 - (meaning of server and client are reversed relative to common browser meaning)
- Mapping between browser roles and platform roles is [specified!](#)
- Look for it in upcoming Chromium releases

Questions?